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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

TIMOTHY FELDMAN
Vice President, Government Affairs

August 7, 1998

Federal Communications Commission
1919 M Street N.W.
ET Docket 98-42, FCC 98-53
Washington, DC 20554

Re: Reply Comments on FCC's Notice of Proposed Rule Making for Regulations for RF Lighting Devices

Dear Sir/Madam:

The National Electrical Manufacturers Association (NEMA) previously submitted comments on the above docket on behalf of the members of its Lamp and Ballast Sections, who are major manufacturers of a variety of RF lighting devices, including electronic ballasts, compact fluorescent lamps (CFLs), and electrodeless fluorescent lamps (EFLs).

We thank the Commission for the opportunity to express additional comments in response to some of the other submissions filed under ET Docket 98-42.

Two comments (National Association of Broadcasters (NAB), Satellite CD Radio) took exception to the current two tiered limit system for RF lighting devices. NEMA strongly urges the Commission to maintain this system since the overwhelming evidence is that it has worked well to protect both the consumer and non-consumer environments over the past decade while allowing manufacturers the flexibility to produce RF lighting devices at reasonable cost for specific application segments of the market. If, as suggested by CD Radio, there are unique issues related to the microwave portion of the frequency spectrum, the Commission should ensure that the limits in this region of the spectrum are appropriate, but should not abandon the two tiered approach for the non-microwave region since there are very valid differences between the licensed communications, expectation for reception by users, encountered signal strengths, power line wiring codes, and RF lighting practices in these two general environments.

NAB urged the Commission to postpone any decision in the current Docket until the record in ET Docket No. 98-80, which is a general Notice of Inquiry, is complete. NEMA reminds the Commission that these two dockets, while related, should be treated as distinct. The current docket is the result of four years of effort, and the Commission should move expediently to reduce regulatory requirements in the non-microwave RF lighting spectrum. Non-microwave RF lighting devices numbering in the many millions of units have been operating for the past decade and have

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not caused interference to radio or other communications services. The Commission has already granted an extension of 60 days to ET Docket 98-80. NEMA members are concerned that given the broader issues covered in ET Docket 98-80, including the complexities raised by many of those commenting regarding microwave RF lighting topics, that the non-microwave RF lighting devices will be in essence unfairly penalized and burdened if decisions related to ET Docket 98-42 are postponed.

NAB also argues that users of broadcast receivers in non-residential environments deserve as much protection as users in residential environments. This argument contains significant technical flaws. First, most non-consumer structures severely attenuate broadcast signals and result in inherently poor reception. Users in such structures do not typically expect to receive broadcast signals unless external antennas are employed. Second, the NAB argument implies that multiple RF lighting devices will add significantly in interference potential in such applications. Both practice and theory have proven otherwise. Non-consumer environments employ grounded and shielded conduits for power line wiring that greatly reduce potentially additive effects. In addition, the lighting fixtures themselves are typically shielded and grounded, a further mitigation means. Lastly, any radiated emissions fall off quickly with distance so that a receiver basically "sees" only the nearest RF lighting device even in an multiple source installation. Contributions from other sources are diminished both by their distance and by additional other factors such as the orientation of the RF lighting device, the phase of the emitted signal, etc. The root-sum-square method used by NAB to illustrate its point greatly over-estimates the contributions from multiple signals in actual installations and is totally inappropriate for predicting potential additive effects from either conducted or radiated sources, since it does not take many other realistic field factors into account.

In closing, NEMA members of the Lamp and Ballast Sections strongly urge the Commission to move swiftly to adopt the provisions in ET Docket 98-42. NEMA would not be opposed to considering the microwave lighting area separately since it is a newer technology and presents additional aspects related to certain specialized communications services not impacted by non-microwave RF lighting devices.

If you have any questions, please do not hesitate to call me at (703) 841-3251 or Anthony Balducci at (703) 841-3245.

Sincerely,

(ATB)